

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An anti-virus system for an electronic mail message, the system ~~including comprising:~~

detecting means for determining the presence of the electronic mail message, wherein the electronic mail message includes at least one message text;

analysis and scanning means for: ~~analysing~~ (i) analyzing and scanning the ~~electronic mail message~~ message text for script tags ~~indicating~~ that indicate the presence of operable program code, and ~~for~~ (ii) removing any such script tags and operable program code from the ~~electronic mail message~~ message text, regardless of whether the script tags and operable program code are associated with a known virus; and ~~without scanning the electronic mail message for strings of characters which are known to be included in known viruses; and~~

application means for applying the electronic mail message, with the script tags and operable program code removed from the message text, to server means.

2. (Currently Amended) ~~[[An]]~~ The anti-virus system as claimed in claim 1, wherein the electronic mail message further includes at least one attachment,

wherein the detecting means for determining the presence of the electronic mail message ~~includes~~ further comprise decomposition means for breaking the electronic mail message into ~~constituent bodies or message texts and attachments of the electronic message; at least the~~ message text and attachment,

wherein the analysis and scanning means comprise scanning means for scanning each of ~~the constituent bodies and attachments~~ the message text and attachment, and

wherein the application means for applying the electronic mail message, with the script tags and operable program code removed from the message text, to server means includes recomposition means for rebuilding the electronic mail message from ~~the constituent bodies and attachments~~ the message text and attachment.

3. (Currently Amended) [[An]] The anti-virus system as claimed in claim 1, wherein the ~~analysis and scanning means comprise scanning means for scanning the message for~~ script tags ~~comprising~~ comprise predetermined character strings.

4. (Currently Amended) [[An]] The anti-virus system as claimed in claim 1, wherein the application means for applying the electronic mail message, with the script tags and operable program code removed from the message text, to server means ~~includes~~ comprise replacement means for replacing the removed script ~~tag~~ tags and operable program code with alternative text.

5. (Currently Amended) [[An]] The anti-virus system as claimed in claim 4, wherein the ~~replacement means is adapted to replace with~~ alternative text ~~for informing~~ informs a recipient of the electronic mail message that operable program code has been removed.

6. (Currently Amended) [[An]] The anti-virus system as claimed in claim 2, wherein the analysis and scanning means include scanning means for scanning one or more attachments for operable macros.

7. (Currently Amended) [[An]] The anti-virus system as claimed in claim 2, wherein the system further comprises quarantine means for at least one of: (i) quarantining a constituent body message text containing operable program code, ~~and/or~~ and (ii) removing from the electronic mail message and quarantining an attachment containing a macro or operable program code.

8. (Currently Amended) [[An]] The anti-virus system as claimed in claim 7, wherein the quarantine means ~~includes~~ further comprise means for removing a macro from ~~an~~ the attachment containing a macro or operable program code, quarantining the macro, and releasing the attachment with the macro removed.

9. (Currently Amended) [[An]] The anti-virus system as claimed in claim 7, wherein the quarantine means ~~includes~~ further comprise means for storing ~~the constituent body~~, one of the attachment ~~or~~ and macro in a quarantine storage location as a quarantined item;

receiving means for receiving a an input indicating a decision ~~whether~~ to deliver the quarantined item ~~may be delivered~~ to an intended recipient; and

~~dependant on~~ responsive to the decision input ~~either~~, one of: (i) releasing the quarantined item with the operable code removed from the quarantined item, for delivery to the an intended recipient with or without the operable code removed , and (ii) releasing the quarantined item with the operable code included in the quarantined item, for delivery to the intended recipient, or and (iii) deleting the quarantined item.

10. (Currently Amended) [[An]] The anti-virus system as claimed in claim 7, wherein the quarantine means ~~includes~~ further comprise informing means, ~~on deleting the quarantined item,~~ for, responsive to deleting the quarantined item, informing ~~the~~ at least one of an intended recipient ~~and/or~~ and a sender of the message that the quarantined item has been deleted without being delivered to the intended recipient.

11. (Currently Amended) [[An]] The anti-virus system as claimed in claim 6, wherein the scanning means for scanning one or more attachments for operable macros ~~comprises~~ further comprise means for sequentially scanning the one or more attachments for a plurality of predetermined character strings indicative of a macro.

12. (Currently Amended) [[An]] The anti-virus system as claimed in claim 11, wherein the means for scanning one or more attachments for a plurality of predetermined character strings ~~includes~~ further comprise termination means for terminating scanning when one of the plurality of predetermined strings is not found on completely scanning the one or more attachments.

13. (Currently Amended) [[An]] The anti-virus system as claimed in claim 1, wherein the detecting means for determining the presence of the electronic mail message ~~is adapted to capture~~ further comprise capturing one or more electronic mail messages passing between a first network and a second network.

14. (Currently Amended) ~~[[An]]~~ The anti-virus system as claimed in claim 13, wherein the detecting means for determining the presence of the electronic mail message ~~is adapted to capture~~ further comprise capturing one or more electronic mail messages passing between an internal or private network and an external or public network.

15. (Currently Amended) A method of ~~removing a virus from~~ providing anti-virus protection for an electronic mail message ~~including the steps of~~ , wherein the electronic mail message comprises at least one message text, the method comprising:

- (a) capturing the electronic mail message;
- (b) scanning the message text for script tags ~~indicating~~ that indicate the presence of operable program code;
- (c) removing the script tags and operable program code from the ~~electronic mail~~ message text, regardless of whether the script tags and operable program code are associated with a known virus; and; without scanning the electronic mail message for strings of characters which are known to be included in known viruses; and
- (d) releasing the electronic mail message, with the script tags and operable program code removed from the message text.

16. (Currently Amended) ~~[[A]]~~ The method as claimed in claim 15, wherein ~~[[the]]~~ step (c) ~~comprising~~ comprises quarantining a the electronic mail message or a ~~part~~ portion of a the electronic mail message containing operable program code.

17. (Currently Amended) [[A]] The method as claimed in claim 15, wherein the electronic mail message further includes at least one attachment, wherein step (a) ~~includes the step of breaking~~ further comprises dividing the electronic mail message into constituent bodies at least the message text and attachment ~~or message texts and attachments of the electronic message;~~ ,

wherein step (b) further comprises scanning the ~~constituent bodies and attachments~~ message text and attachment, and

wherein step (d) ~~includes the step of~~ further comprises rebuilding the electronic mail message from ~~the constituent bodies and attachments~~ at least the message text and attachment.

18. (Currently Amended) [[A]] The method as claimed in claim 15, wherein ~~step (b)~~ further comprises scanning the message for the script tags ~~comprising~~ comprise predetermined character strings.

19. (Currently Amended) [[A]] The method as claimed in claim 15, wherein step (c) ~~includes~~ further comprises replacing the removed script ~~tag~~ tags and operable program code with alternative text.

20. (Currently Amended) [[A]] The method as claimed in claim 19, wherein the ~~step of~~ replacing the removed script tag and operable code with alternative text ~~comprises using~~ alternative text ~~for informing~~ informs a recipient of the electronic mail message that operable program code has been removed.

21. (Currently Amended) [[A]] The method as claimed in claim 17, wherein step (b) ~~includes~~ further comprises scanning one or more attachments for ~~operable~~ macros, and wherein step (c) further comprises, responsive to finding a macro: [[,]] (i) removing from the electronic mail message the macro, and (ii) quarantining at least one of the macro ~~any macros and/or~~ and the attachment ~~any attachments~~ containing the macro ~~macros~~.

22. (Currently Amended) [[A]] The method as claimed in claim 16, wherein ~~the step of~~ quarantining a the electronic mail message or a ~~part~~ portion of a the electronic mail message comprises ~~the steps of:~~

~~storing a constituent body, attachment or macro of the~~ electronic mail message or the portion of the electronic mail message in a quarantine storage location as a quarantined item;

receiving a decision whether the quarantined item may be delivered to an intended recipient; and

~~dependant on~~ responsive to receiving the decision, ~~either~~ one of: (i) releasing the quarantined item ~~for delivery, with or without~~ the operable code or macro deleted from the quarantined item, for delivery to the an intended recipient, (ii) releasing the quarantined item with the operable code included in the quarantined item, for delivery to the intended recipient, ~~or~~ and (iii) deleting the quarantined item.

23. (Currently Amended) [[A]] The method as claimed in claim 22, wherein ~~the step of~~ deleting the quarantined item ~~includes~~ further comprises informing at least one of the intended

recipient ~~and/or~~ and a sender of the message that the quarantined item has been deleted without being delivered to the intended recipient.

24. (Currently Amended) [[A]] The method as claimed in claim 21, wherein ~~the step of scanning attachments for operable macros includes~~ step (b) further comprises sequentially scanning the one or more attachments for a plurality of predetermined character strings indicative of a macro.

25. (Currently Amended) [[A]] The method as claimed in claim 24, wherein ~~the step of scanning attachments for a plurality of predetermined character strings is terminated~~ step (b) further comprises terminating when one of the plurality of predetermined strings is not found ~~on~~ completely scanning in the attachment.

26. (Currently Amended) [[A]] The method as claimed in claim 15, wherein step (a) comprises capturing the electronic mail message ~~messages~~ passing between a first network and a second network.

27. (Currently Amended) [[A]] The method as claimed in claim 26, wherein step (a) comprises capturing the electronic mail message ~~messages~~ passing between an internal or private network and an external or public network.

28. (Previously Presented) A computer program comprising code means for performing all the steps of the method of claim 15 when the program is run on one or more computers.

29. (Currently Amended) [[A]] The computer program as claimed in claim 28, wherein the computer program is embodied on a computer-readable medium.

30. (Previously Presented) A computer program product comprising program code means stored in a computer-readable medium for performing the method of claim 15, when that program product is run on one or more computers.

31. (New) The anti-virus system as claimed in claim 1, wherein the electronic mail message further includes at least one attachment, the system further comprising:

decomposition means for dividing the electronic mail message into at least the message text and attachment;

analysis and scanning means for: (i) analyzing and scanning the attachment for a macro, and (ii) regardless of whether the macro is associated with a known virus, at least one of: (a) deleting the attachment, (b) quarantining the attachment, (c) removing any such macro from the attachment and quarantining the macro, and (d) removing any such macro from the attachment and deleting the macro.

32. (New) The anti-virus system as claimed in claim 31, further comprising reassembling means for reassembling the electronic mail message from at least the message text and attachment, with the macro removed from the attachment.

33. (New) The method as claimed in claim 15, wherein the electronic mail message further includes at least one attachment, the method further comprising:

scanning the attachment for one or more macros; and

regardless of whether a macro is associated with a known virus, at least one of: (a) deleting the attachment, (b) quarantining the attachment, (c) removing any such macro from the attachment and quarantining the macro, and (d) removing any such macro from the attachment and deleting the macro.

34. (New) The method as claimed in claim 33, further comprising reassembling the electronic mail message from at least the message text and attachment, with the macro removed from the attachment.

35. (New) The anti-virus system of claim 9, further comprising storage means for storing a list of persons authorized to approve a quarantined item, wherein receiving means for receiving an input indicating a decision further comprises receiving the decision from a person that is included on the stored list of authorized persons.

36. (New) The method as claimed in claim 22, further comprising storing a list of persons authorized to approve quarantined items, wherein receiving a decision whether the quarantined item may be delivered to an intended recipient further comprises receiving the decision from a person that is included in the stored list of authorized persons.